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Oceans and the law of the sea: oceans and the law of the sea

Summary report of the 2017 parliamentary hearing

Note by the President of the General Assembly

The present document contains the summary report of the 2017 parliamentary hearing, held in New York on 13 and 14 February 2017, which is circulated pursuant to General Assembly resolution 65/123.

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A world of blue: preserving the oceans, safeguarding the planet and ensuring human well-being in the context of the 2030 Agenda

Summary report on the 2017 parliamentary hearing, jointly organized by the Inter-Parliamentary Union and the Office of the President of the General Assembly at United Nations Headquarters, 13 and 14 February 2017

Opening session

1. The 2017 parliamentary hearing served as an opportunity for parliamentarians to discuss issues related to ocean health in preparation for the United Nations Conference to Support the Implementation of Sustainable Development Goal 14 (see General Assembly resolution 70/226), which will be convened at United Nations Headquarters in New York from 5 to 9 June 2017. Co-hosted by the Governments of Fiji and Sweden, the Conference will aim to generate concrete commitments and solutions to reverse the decline in the health of the ocean.[1]

2. The two-day session was opened by the President of the General Assembly, Peter Thomson, the President of the Inter-Parliamentary Union (IPU), Saber Chowdhury, and the Under-Secretary-General for Economic and Social Affairs, who spoke on behalf of the Secretary-General.

3. The President of the General Assembly recognized the critical role of parliamentarians as standard-bearers, policy shapers and legislators. He advised parliamentarians to use the hearing as a step towards preparing their Governments for the Ocean Conference and asked them specifically to come to the Conference with voluntary commitments at the regional, national and local levels to reinforce global efforts. He recommended that parliamentarians use Sustainable Development Goal 14 and its targets and indicators as a road map for improving the health of the ocean.

4. The President of IPU commended the mutually reinforcing partnership between IPU and the United Nations and noted that the Secretary-General was formerly a parliamentarian. As a citizen of Bangladesh, a low-lying country, the President of IPU was keenly aware of the risks presented by rising sea levels. By 2050, as many as 30 million people in Bangladesh might be displaced from coastal areas. As in other countries, most of the individuals vulnerable to displacement were among the poorest of the poor.

5. The President of IPU identified a range of issues that related to or had an impact on ocean health: the resilience of local economies, cultural heritage, climate change, marine pollution, the food chain and the extraction of natural resources from the seabed. He recommended that parliamentarians use "Parliaments and the Sustainable Development Goals: a self-assessment toolkit", a publication produced by IPU and the United Nations Development Programme, to help mainstream the Sustainable Development Goals throughout their work and fulfil their legislative and oversight functions.

6. The President of IPU framed the hearing as an important step in the journey towards achieving the Sustainable Development Goals. The aims of the Conference

[1] The scientific community has adopted the notion of one global ocean, as opposed to four distinct oceans. The concept of a global ocean system recognizes that the Pacific, Atlantic, Indian and Arctic are not oceans, but ocean basins. The present summary report refers to ocean in the singular, referring to the global ocean system.

would be to raise awareness of ocean health and encourage parliamentarians to take action to reverse the decline of the ocean.

7. The Under-Secretary-General read a message from the Secretary-General, which emphasized the centrality of the ocean, seas and coastal areas to the earth's ecosystems and to the 2030 Agenda for Sustainable Development, noting that the ocean had never been more vulnerable. While the challenges to restoring ocean health were daunting, the international community had the tools to convert challenges into opportunities.

8. In his message, the Secretary-General urged parliamentarians to focus on implementation. He described the forthcoming Conference as a unique opportunity to find concrete solutions to environmental threats.

I. The ocean and its carrying capacity

9. The single, interconnected world ocean forms about 90 per cent of the earth's biomes and is crucial for human well-being and sustainable development. Human beings depend heavily on the ocean for oxygen, nutrition and, increasingly, for drinking water. The world's population gets 17 per cent of its animal protein from the sea. For people living in 30 countries, mainly in Africa and Asia, the ocean provides 33 per cent of their animal protein; 22 of those countries are low-income and food deficient. In total, 150 countries use desalination plants to meet their population's water needs. Worldwide, desalination plants produce over 22.9 billion United States gallons of water a day. Half of the world's oxygen is produced by the ocean.

10. The ocean also plays a crucial role in local livelihoods and in the global economy. Indeed, 75 per cent of world trade by volume and 59 per cent of world trade by value travels by sea. Communications are ocean-dependent as 95 per cent of intercontinental Internet traffic passes through submarine cables. In 2015, tourism was the basis for 9.5 per cent of the world economy, half of which involved international travel to coastal areas. Finally, the seabed is an important source of crude oil, tin, magnesium, sulphur, gold and gravel. Seabed mining is likely to increase as land-based deposits are exhausted.

11. Despite its capacity for self-regeneration, the ocean is imperilled by the cumulative effects of climate change, unsustainable extraction of marine living resources, including overfishing, excessive by-catch, unsustainable coastal development and marine pollution, including in the form of hazardous substances, excess nutrients and underwater noise pollution.

12. Greenhouse gas emissions cause ocean warming, acidification and oxygen loss. The widespread effects contribute to melting ice sheets, rising sea levels and an increase in the intensity and frequency of extreme weather events. Warming ocean waters alter the composition of marine ecosystems. As species follow their preferred temperatures into new areas, new interactions produce species loss and a decline in biodiversity. This is especially true at low latitudes, where marine ecosystems are vital for the marine food chain.

13. Carbon emissions decrease the pH level of seawater, a process known as ocean acidification. A more acidic environment threatens the viability of calcifying species, including shellfish, corals and calcareous plankton, which, in turn, disrupts the food chain. Many of the changes that have taken place are irreversible: for example, there is a high risk that about 90 per cent of coral reefs will be lost to bleaching over the coming decades, even if the global surface temperature does not increase by more than 2°C above pre-industrial levels.

14. Excessive marine pollution from human activities at sea and on land, such as agriculture, sewage disposal and ship traffic, cause dead zones, low-oxygen areas in which most marine life suffocates. In dead zones, entire ecosystems are destroyed. While hypoxia is a naturally occurring phenomenon, scientists believe that human impacts have dramatically increased the number of ocean dead zones, which number more than 500 as of 2017.

15. Industrial fisheries have grown rapidly since 1945 and overall are poorly managed. Overfishing has decimated fish stocks. With better oversight, fisheries could improve productivity by 20 per cent. Large fisheries have negative impacts on small, local, "artisanal" fishers and jeopardize their livelihood, as well as the cultural heritage and economic structures that they represent.

16. The limits of the ocean's carrying capacity are being or, in some cases, have been reached. The assumption that the ocean could absorb indefinitely the by-products of human activity in any amount was flawed. The interaction between the various pressures on the ocean produces a cumulative effect that is more devastating than the sum of its parts. Integrated ocean management is essential to addressing the threats to marine ecosystems. Immediate action is necessary to reverse the ocean's decline.

II. Towards a sustainable blue economy

17. The ocean's role in human life is multifarious. The ocean and its coasts provide oxygen, climate regulation, food, including protein, medicine, human habitats, employment, cultural heritage, inspiration, recreation and a place to restore wellness. Yet, too often, the ocean has served as a site of exploitation and a dumping ground. The result is a decline in ocean health so extreme that, in many respects, damage reversal may no longer be possible, leaving damage mitigation and resilience-building as the only courses of action.

18. As many participants noted, the first step towards building a sustainable "blue economy" is to identify and address the economic drivers of pollution and overconsumption, especially in the developed world. Parliamentarians should support government policies that incentivize sustainable behaviour in the private and public sectors at the national, district and community levels.

19. While the decline in ocean health is unprecedented, tools and techniques already exist that can help reverse the decline. Genetic modification may mitigate damage done to ecosystems. In a post-plastic era, biodegradable organic materials may replace plastic. Autonomous vessels, the marine equivalent of the self-driving car, may facilitate wastewater treatment and the removal of plastics and pollution.

20. Innovative marine technologies can help meet the needs of a global population expected to reach 9 billion by 2030. As the global population expands, the need for healthy protein with a lower carbon footprint can be met by sustainable aquaculture, with the added benefit of providing employment to some of the poorest communities in coastal areas around the world.

21. The participants acknowledged the risks associated with the adoption of new technologies. While many of these technologies will require decades to develop fully, they must be carefully evaluated for their potential impact on human activities, economies and marine ecosystems. There is also the danger that fishing on the high seas (the more than 50 per cent of the ocean that lies beyond national jurisdiction) may be monopolized by big business. Parliamentarians from developing countries expressed interest in funding mechanisms to ensure innovation is not dominated by high-income countries. The discussion made clear that a new

set of investment and financial instruments is needed to nurture the development of an inclusive, sustainable ocean economy.

Myriad forms of pollution

22. Parliamentarians elaborated on the numerous forms of pollution, including:

(a) Air pollution caused by emissions;

(b) Water pollution cause by fertilizer run-off (80 per cent of all pollution in the ocean), wastewater (sewage), oil spills and marine debris, light and noise pollution, and thermal pollution due to climate change. The "polluter pays" principle is one important way to discourage pollution while creating a revenue stream to fund work on Sustainable Development Goal 14.

23. While all of these forms of pollution were mentioned during the hearing, the following topics received particular attention.

Plastic pollution

24. Every square kilometre of the ocean's surface is polluted with plastic. At every depth, from the surface to the ocean floor, the ocean is polluted by millions of kilograms of plastic. It is estimated that between 15 trillion and 50 trillion pieces of plastic are in the ocean. Abandoned, lost or otherwise discarded fishing gear and larger plastics kill marine life through entanglement, strangulation, suffocation, starvation due to reduced digestive capacity and poisoning. If pollution rates continue on their current trajectory, certain estimates indicate that there could be, by weight, more plastic than fish in the ocean by 2050.

25. A parliamentarian from Thailand remarked that a switch to a "sufficiency economy" in which moderation, rather than consumption, was the guiding value may address the core cause of plastic pollution. The Buddhist approach of the "Middle Path" places an emphasis on considering the greater good when making daily choices. A parliamentarian from Iceland suggested that a less resource-intensive pattern of consumption and production was necessary to reverse the ocean's decline.

26. There was general agreement that more plastics would be recycled if Governments were to build better collection infrastructure and raise public awareness on the issue. While recycling and collection infrastructure is costly, economies of scale can be reached if large segments of the population recycle. Banning single-use plastic bags was discussed with particular reference to the example set by countries such as France, Monaco, Morocco and Rwanda.

Impact of microplastics on food safety

27. As plastics disintegrate in ocean waters, they break down into microplastics, plastic particles so small they can be seen only through a microscope. Plankton, which are at the bottom of the marine food chain, swallow the microplastics, fish then eat the plankton and the microplastics are eventually ingested by humans. The potential health effects are devastating. More than 1 billion people rely on seafood as their primary source of protein. Microplastics are so pervasive in the ocean that they can even be found in table salt. The Food and Agriculture Organization of the United Nations has convened a group of experts to evaluate the effects of microplastics on food safety.

Microbeads

28. Microbeads are tiny plastic particles used in toothpaste, cosmetics and beauty products that wastewater treatment facilities cannot break down. They arrive intact in the ocean where they absorb other pollutants such as motor oil, flame retardants and pesticides. Marine life then consumes these tiny, highly toxic particles. Many countries, including Canada and the United States of America, have banned the use of microbeads. Many parliamentarians advocated an international ban.

Ghost gear

29. Several participants discussed the damage done by ghost gear, marine equipment discarded by fishers. It is a major cause of depleted fish stocks and accounts for 10 per cent of all marine litter.

Wastewater

30. Several parliamentarians expressed the desire to improve wastewater management in developing countries, as well as to improve waste disposal facilities on vessels. The 2012 Manila Declaration on Furthering the Implementation of the Global Programme of Action for the Protection of the Marine Environment from Land-based Activities cited wastewater management as one of the three main priority areas for the Global Programme of Action. A parliamentarian from Italy observed that pollution from ships was spoiling coastal waters in and near port towns. He proposed that severe fines be imposed for illegal waste and litter to ensure compliance with the law. Up to 80 per cent of urban sewage discharged into the Mediterranean Sea is untreated. It was suggested that an international database be established to record data on infractions by vessels and industrial fisheries around the world to facilitate the enforcement of corporate responsibility and international law.

Recommendations

31. The participants put forward the following recommendations:

(a) Encourage manufacturers to design multi-use products with a sustainable end-of-life scenario. This will ensure that biodegradable products are the norm in future;

(b) Educate consumers in making responsible choices with regard to plastics;

(c) Consider banning single-use plastics, particularly bags, as well as Styrofoam;

(d) Improve collection infrastructure to make recycling easier;

(e) Incentivize manufacturers to explore the use of biodegradable alternatives to plastic;

(f) Incentivize fishers to bring their gear back to land;

(g) In coastal communities, encourage start-ups to creatively upcycle or reuse marine gear by turning it into new products;

(h) Invest in mobile waste collection on boats to remove marine litter;

(i) Consider subsidies to make environmentally friendly products more affordable;

(j) Impose an international ban on microbeads;

(k) Consistent with the "polluter pays" principle, impose severe fines on companies that do not observe sustainable practices and local and international laws regarding wastewater management and litter. Use the resulting revenue to invest in sustainable marine ecosystem management and resilience-building;

(l) Pursue innovative financing to improve management of wastewater treatment plants;

(m) Incentivize local solutions and start-ups to provide services to improve wastewater treatment;

(n) Declare coral reefs protected marine areas to slow coral bleaching and mitigate the effects of thermal pollution.

Fishing

32. Small-scale fisheries provide the most employment of all the ocean-based industries: 52 million full-time and part-time fishers and fish workers are employed in small-scale fisheries, with 96 per cent of the workers living in developing countries.

33. The scourge of overfishing by industrial fisheries has put the employment of small-scale fishers and the production of fish protein at high risk. Unsustainable fishing practices have depleted fish stocks, dramatically threatening the viability of local artisanal fishers and decreasing biodiversity. Several parliamentarians lamented the overfishing by industrial fleets, weak regulation and lack of enforcement of existing laws. A parliamentarian from Ireland described the outrage felt by Irish artisanal fishers who abide by strict European Union regulations only to observe industrial fishing fleets trawling for unsustainable yields.

34. The problem is exacerbated in low-income countries whose waters are overfished by industrial fleets based in larger and richer nations. A minister from Fiji asked what could be done to protect small island nations like her own which observed regulations regarding overfishing, but suffered the consequences of large corporate fishing companies, which did not.

35. Industrial fishing practices are alarmingly inefficient. A parliamentarian from Norway remarked that commercial fisheries discard about 80 per cent of the fish they catch. The discarding of "by-catch" owing to the incidental capture of non-target fish has caused a significant decline in biodiversity. By-catch often includes endangered species. A participant noted that vast subsidies to industrial fisheries effectively encourage overfishing. If those harmful subsidies were eliminated, the funds could be redirected to conservation. Several parliamentarians discussed the importance of enabling depleted stocks to recover. In this context, marine protected areas were identified as a promising method for stock recovery.

36. The role of consumers and the private sector in promoting sustainable fishing was discussed. Tuna, a high-demand fish in decreasing supply, was cited as an example of how innovative practices might encourage sustainability. The use of data trackers can ensure end-to-end traceability of tuna, creating transparency between fisheries and consumers. Tuna labelled "fair trade" would cost consumers more, but provide a guarantee that it was sustainably sourced. One parliamentarian cautioned that most consumers would not be able to afford the surcharge associated with "fair trade" products.

37. It was recommended that artisanal fishers, many of whom belong to communities that have fished for centuries and even millennia, should be included in decision-making. Their local expertise and fishing knowledge could help solve the problem of depleted stocks and waning biodiversity. In the same vein,

parliamentarians expressed a commitment to preserve the cultural heritage of coastal communities, where sustainable fishing was vital to both the communities and their cultures.

38. The potential of aquaculture to produce the vast amounts of fish protein needed by a growing global population was explored, together with a concern for its impact on coastal habitats and mangroves. While aquaculture will be a major production method for meeting humanity's nutritional needs, it needs to be managed carefully to reduce its impact on biodiversity, artisanal fishers and coastal communities.

Recommendations

39. The participants put forward the following recommendations:

(a) Ensure sustainable fishing. The United Nations Convention on the Law of the Sea protects small-scale fisheries and outlaws unsustainable fishing. Better regulation, monitoring and enforcement of existing agreements, such as the Agreement on Port State Measures to Prevent, Deter and Eliminate Illegal, Unreported and Unregulated Fishing of the Food and Agriculture Organization of the United Nations, are needed. Parliamentarians should ensure compliance;

(b) Encourage Governments to pass a legally binding instrument under the United Nations Convention on the Law of the Sea on the conservation and sustainable use of marine biological diversity of areas beyond national jurisdiction;

(c) Link trade and sustainability such that trade deals must contribute to Sustainable Development Goal 14 in order to be approved by parliaments;

(d) Impose severe fines on vessels that do not observe local and/or international laws with regard to overfishing and pollution;

(e) Scale up innovative methods, such as a fair trade labelling, to develop markets for sustainably farmed fish;

(f) Use data trackers to ensure end-to-end traceability, monitoring, regulation and consumer confidence;

(g) Integrate the voices, wisdom and expertise of local fishers and their coastal communities in decision-making. Ancient fishing communities are a part of our collective cultural heritage and can make an essential contribution to the solutions to ocean decline;

(h) Engage as many stakeholders as possible in the process, including ocean users, industry, civil society organizations, citizen scientists, children and students;

(i) Enforce fishing quotas and maximum sustainable yields, as well as moratoriums on fishing to allow fish stocks enough time to regenerate;

(j) Manage aquaculture growth so that it does not displace artisanal fishers, depress biodiversity or threaten the coastal environment through the clearing of mangroves and coastal habitats;

(k) Create marine protected areas to enable depleted fishing stocks to recover;

(l) Discourage harmful subsidies and redirect funds to ocean conservation.

Extractive industries, marine genetic resources and cables

Seabed mining

40. The seabed of the high seas, which account for more than 50 per cent of the ocean, is capable of providing humanity with a source of minerals for many hundreds, if not thousands, of years. Under the United Nations Convention on the Law of the Sea, these mineral resources are legally recognized as the common heritage of humankind. Under international law, the economic benefits derived from such resources must be shared equally between all nations.

41. The International Seabed Authority was established under the Convention to regulate deep seabed mining. The Authority controls access to mineral resources by awarding mining contracts. Applications for seabed mining contracts may be sponsored by any of the 168 nations that are party to the Convention. As such, nations at any stage of development, including landlocked countries, have equal rights to apply for contracts to mine the seabed for mineral resources. The Authority awards contracts based on the consensus of its members.

42. For most of the Authority's 30-year history, the technological and financial challenges involved in extracting minerals from the seabed have acted as barriers to significant rates of ocean mining. As those barriers are more easily surmounted, there is likely to be a dramatic increase in seabed mining. Currently, the most active mining area is the Clarion-Clipperton Zone in the high seas off the coast of Mexico and California, United States. There are 16 active operations in the area, covering 3 per cent of the Pacific Ocean and it would take several thousand years to exhaust the supply of minerals accessible through even one mine in one of those 16 areas under exploration.

43. Parliamentarians expressed concern about the environmental threats of seabed mining. As the rate of seabed mining increases, parliamentarians have a responsibility to monitor the impact and make certain that their government contracts with the International Seabed Authority adhere to the mining regulations under the United Nations Convention on the Law of the Sea.

Marine genetic resources

44. Marine scientific research in international waters is open to all nations. However, marine genetic resources have an unclear legal character and are not defined in the United Nations Convention on the Law of the Sea. There are States that argue that marine genetic resources should be included as part of the common heritage of humankind, and others that argue the opposite position, that they fall under the freedom of the high seas. Negotiations for a legally binding legal instrument under the United Nations Convention on the Law of the Sea on the conservation and sustainable use of marine biological diversity of areas beyond national jurisdiction are ongoing. A common view on several difficult topics must be achieved by Member States. In this context, parliamentarians can support an advancement of the negotiations and later ensure the implementation of the legally binding instrument.

Submarine telecommunication cables

45. While many assume that most communications are transmitted by satellite, 95 per cent of international communications are, in fact, transmitted through submarine cables, which are therefore a matter of national and international security. Submarine cables need to be maintained and protected from the impact of natural disasters, the movement of tectonic plates, technical failure, accidental interference through deep sea fishing and intentional damage.

46. While 99 per cent of the cables are owned and operated by the private sector rather than Governments, under the United Nations Convention on the Law of the Sea most nations have the obligation to safeguard and protect submarine cables both within their exclusive economic zone and outside their territorial seas. However, few countries have modern legislation to protect cables. Parliamentarians should advocate the maintenance of submarine cables to safeguard international communications and bandwidth. They can also press their Governments to ensure that industrial fishing does not interfere with cables.

47. A member of the International Cable Protection Committee described the environmental impact of submarine cables as benign owing to the use of chemically inert materials. The cables are laid along the seabed where, according to the industry, they have minimal impact on marine life. Because the areas where the cables are placed are protected from human intervention, the cable corridors become, in effect, marine protected areas, encouraging biodiversity.

48. Strong broadband connections are the basis of the digital economy and it is therefore a matter of social justice that all countries have a robust broadband connection. Coastal countries are at an advantage in this regard and can consider sharing their bandwidth with their inland neighbours.

Nuclearization of the ocean

49. Radioactive material in the ocean poses a unique threat to marine and human health that scientists have yet to quantify. A parliamentarian expressed concern that radioactivity had been measured in the ocean and that nuclear tests had been carried out in French Polynesia. Another noted that the radioactive plume from the damaged nuclear plant in Fukushima, Japan, had been detected in the Pacific Ocean.

50. Though nuclear testing in the ocean is now forbidden, nuclear submarines still navigate the ocean. A parliamentarian asked whether the denuclearization of the ocean would be an appropriate topic for the United Nations high-level international conference on nuclear disarmament. The Secretary-General of the International Seabed Authority observed that the United Nations Convention on the Law of the Sea had established that the seabed area be used exclusively for peaceful purposes. It prohibits the militarization of the deep sea.

Recommendations

51. The participants put forward the following recommendations:

(a) Ensure that radioactivity tests of ocean waters take place as part of the ongoing evaluation of ocean health;

(b) Require that an environmental impact assessment be performed prior to every seabed mining licensing agreement;

(c) Demand that marine genetic resources are effectively protected under any new agreement;

(d) Adopt national legislation to protect submarine cables and the surrounding marine environments.

Tourism

52. In 2016, 500 million people travelled internationally to visit coastal areas. While the economic contributions of tourism are significant — for certain small island nations, tourism accounts for as much as 50 per cent of gross domestic product — the environmental impact of coastal and ocean tourism has been devastating. Mangroves, coral reefs, nesting sites for marine turtles and seagrass

meadows have been cleared in many coastal areas to make way for hotels and beaches. The negative impact of tourism on ocean and coastal health is due largely to the overconcentration of tourists in specific destinations. This disturbs the ecosystem through overdevelopment and pollution, in particular from wastewater. Ocean cruises place additional stress on the ecosystem in the form of sewage, wastewater and pollution.

53. A parliamentarian from Belgium pointed out that people who visit coasts do so because they have a love for the sea. These ocean-loving tourists represent a potential international lobby of ocean advocates. Directing an ocean health public awareness campaign towards ocean tourists might mobilize half a billion tourists into environmental action. A related idea was the promulgation of "voluntourism" in which tourists spend a part of their trip working on coastal clean-up efforts or learning about the local fishing community. The market opportunities for consumers who wish to spend time near the ocean without causing harm were discussed. One example was encouraging tourists to factor in the environmental impact of different cruise lines' waste management systems when selecting their next cruise. Greater consumer awareness would incentivize hospitality and tour operators to clean up their environmental act.

54. A senator from Kenya proposed applying the model of ecotourism that originated with the Masai and the conservation of the savannah to coastal communities. In this model of ecotourism, environmental sustainability, cultural heritage and the participation of the indigenous community are core features. A human-centred approach to ecotourism involving the active participation of coastal communities was recommended.

Recommendations

55. The participants put forward the following recommendations:

(a) Encourage the private sector to pursue ecotourism in ocean and coastal environments;

(b) Engage hotel chains, cruise lines and other actors in the tourism industry to apply sustainable practices and create incentives throughout the industry to lessen its environmental impact;

(c) Integrate cultural heritage and the participation of local communities in ecotourism;

(d) Educate the general public and tourists, in particular, on the environmental impact of seaside holidays.

Climate change

56. Global warming worsens the harm done to the ocean. Ocean acidification, for example, has far more serious effects in a warming environment. The precondition for reversing ocean decline is therefore to cut emissions drastically, as a matter of urgency.

57. In 2015, the world's first comprehensive climate agreement, the Paris Agreement, was forged at the twenty-first session of the Conference of the Parties to the United Nations Framework Convention on Climate Change. It came into force on 4 November 2016. Signed by 194 countries and ratified by 134, the Paris Agreement is a commitment to reducing global emissions, especially in developed nations, and to limiting the increase in global average surface temperature to well below 2°C above pre-industrial levels. The agreement also commits signatories to increase their ability to adapt to the adverse impacts of climate change, foster

climate resilience and produce finance flows consistent with a pathway towards low greenhouse gas emissions and climate-resilient development. Developed countries have committed to mobilizing $100 billion per year in public and private finance by 2020 to support low-income and medium-income nations in adhering to the Paris Agreement.

58. Critics of the Paris Agreement note that the agreement is non-binding and that limiting temperature rise to less than 2°C above pre-industrial levels will not protect the earth from the dangers of melting ice sheets and rising sea levels.

59. Rising sea levels are a particular threat to the 183 countries that are either coastal or small island States. The International Organization for Migration projects that 200 million people will be displaced by 2050 owing to overall environmental changes.

60. In addition to cutting emissions, Governments can adopt "blue carbon" policies to enhance resilience to climate change. These include establishing marine protected areas that span latitudes or have corridors between them to allow for species migration and restoring mangrove forests, kelp and seagrass meadows. While such interventions can slow ocean decline, they cannot reverse it. Only drastic cuts in emissions in concert with other conservation efforts will be able to arrest ocean decline.

61. Participants noted that climate change needs to be addressed at the global, national and local levels. A speaker from Fiji described the myriad efforts her Government had made at the national level to protect coasts and coastal inhabitants, as well as local government efforts to involve communities in learning how to mitigate the effects of climate change. Despite a few blind spots and points of contention about the science of climate change and corresponding solutions, there is an overwhelming body of knowledge already available for policymakers to take decisive action.

62. Alternatives to energy based on fossil fuels include innovative technologies that harness energy from wind and deep ocean currents. These have the potential to replace less environmentally friendly energy sources; however, their impact on societies, economies and ecosystems must be assessed carefully.

Recommendations

63. The participants put forward the following recommendations:

(a) Ensure that national carbon dioxide reduction commitments are sufficiently ambitious to contribute to the global target of limiting global temperature rise to under 2°C above pre-industrial levels;

(b) Expand and manage coherent networks of marine protected areas to safeguard marine biodiversity and promote resilience;

(c) Protect coasts through conservation;

(d) Promote and apply blue economy approaches, emphasizing the economic benefits of low-carbon solutions to developing countries and small island developing States, in particular;

(e) Plan and implement policies at the global, national and local levels;

(f) Develop and support measures to address the issues associated with coastal and island population displacement, including the improvement of international law in terms of definitions, rights and procedures for climate refugees and migrants, including the development and implementation of financing measures;

(g) Earmark funds in global public finance mechanisms to support adaptation and mitigation in coastal areas and small island developing States;

(h) Track financial flows to support climate change efforts related to the ocean and coasts;

(i) Encourage private sector investments in "grey" coastal infrastructure (culverts, break walls and roads) for coastal habitat protection and restoration;

(j) Educate young people to become ocean-literate citizens and scientists;

(k) Educate the public to encourage environmentally conscious consumption.

International law, regulation and disputes

64. The efficacy of current international law to protect the ocean was discussed. Some participants believed the current legal regime governing the ocean was weak and that new, legally binding regulations on the conservation and sustainable use of marine biological diversity of areas beyond national jurisdiction under the United Nations Convention on the Law of the Sea were necessary. Other participants took the view that existing international law was sufficient and that the problem was due to a combination of poor enforcement and limited resources. According to them, technological advances, such as big data, enabled much more comprehensive monitoring of the high seas and should translate into better enforcement and accountability.

65. Several parliamentarians from various regions noted that illegal fishing occurred regularly and seemingly without consequences. Several others voiced concerns about international disputes over coastal access, their exclusive economic zones and resources, including specific current conflicts. Others noted that the adjudication process under the International Tribunal for the Law of the Sea was too slow. Other parliamentarians expressed concerns about disputes with neighbours over coastal access and borders. As one parliamentarian said, "if you do not know what is your land or sea, you cannot conserve it".

66. For many nations, piracy is a threat within exclusive economic zones and on the high seas. Africa, which counts 38 coastal States, is particularly affected by piracy. Worldwide, 90 per cent of imports and exports are transported by water and a significant number of the most strategic commercial shipping lanes lie within African maritime jurisdictions. In addition to piracy, African countries must contend with illicit fishing in their waters and illicit trafficking in a wide range of goods, including arms and drugs, as well as in people. Recognizing that no single country can guarantee the security of its waters alone, 31 African nations signed the Charter on Maritime Security and Safety and Development in Africa (Lome Charter) in 2016, pledging a cooperative approach to bringing law, order and sustainability to the waters off the continent. The Charter awaits ratification.

Recommendations

67. The participants put forward the following recommendations:

(a) Strengthen governance of the high seas, including through better enforcement of international law and a more effective international dispute resolution mechanism;

(b) Establish extensive marine sanctuaries on the high seas to enable depleted fishing stocks to recover and marine life to flourish;

(c) Take resolute action against illegal fishing and criminal activities, such as piracy.

III. From words to action: the challenge of implementation

Role of international cooperation in saving the ocean

68. The ocean and its ecosystems cover the planet, irrespective of political borders. As a senator from Mexico said, "fish do not have passports". By its very nature, protecting the ocean is a transboundary endeavour that requires international cooperation. Parliamentarians underscored the importance of accountability and transparency on all ocean-related action, which should be based on the findings of the first World Ocean Assessment report and other properly vetted information.

Ocean data

69. Data-sharing is one form of international cooperation. Effective ocean policies begin with accurate information. In order to ensure that every country has access to first-rate data on marine environments, the first World Ocean Assessment was completed. It supports Governments by providing a framework for regional and national assessments and management decisions. The resource supports the implementation of the 2030 Agenda, especially Sustainable Development Goal 14, and will assist those assessing the implementation of Goal 14. Parliamentarians can improve their Governments' policymaking by incorporating information from the Assessment in their national and regional ocean governance policies and assessments.

Funding for Sustainable Development Goal 14

70. Several parliamentarians expressed concern that their Governments, though committed to Sustainable Development Goal 14, simply lack financial resources. There is a critical need for high-income countries to financially support the efforts of middle-income and low-income countries and to provide technical capacity-building. Small island developing States are experiencing the brunt of ocean pollution and overfishing, which are disproportionately the responsibility of large multinationals based in developed countries. Ensuring appropriate taxation of these companies and fines for breaches of international law will encourage sustainable practices and provide a revenue stream to address the lack of funding.

International law

71. Parliamentarians noted the lack of enforcement of existing international laws designed to protect the ocean. A legally binding instrument is needed to ensure the conservation and sustainable use of marine biological diversity of the high seas. Such a legal instrument is currently being negotiated at the United Nations. Participants lamented the slow pace of the negotiations. Parliamentarians can apply pressure to their Governments on this issue and direct them to take action on ocean protection. Such advocacy may help accelerate and focus the negotiations.

Integrated solutions at the national level

72. National governance with regard to the ocean involves not just one ministry, but every ministry. Each country should establish a ministry, council or other authoritative agency devoted to maritime issues in order to coordinate a government-wide strategy for achieving Sustainable Development Goal 14.

73. Several parliamentarians advocated the use of a process known as marine spatial planning, an adaptation of land-use planning for marine waters. The process recognizes the geographical features, natural resources and habitats of the marine area under national jurisdiction. It involves multiple ocean users, including local

citizens, representatives from energy, fishing, shipping, Government, conservation organizations and recreation providers surveying the current uses of the waters. It then uses that information to make informed and coordinated decisions about how to use and manage marine resources sustainably. The targets and indicators of Goal 14 should serve as reference points and organizing principles for this process.

74. A more participatory, bottom-up approach in marine policymaking was discussed. Participants noted that policy should not be informed exclusively by scientific knowledge but should also take account of local traditional knowledge, cultural practices and the knowledge of fishing communities.

75. The need to be sensitive to marine environments was illustrated by the example of street lighting in a seaside town. If street lights are placed without concern for local marine habitats, the brightest light that newly-hatched turtles see is not moonlight, but street lights. As a result, the turtles crawl in the direction of traffic. This is one example of the countless ways in which ocean-illiterate land-use planning can damage marine ecosystems.

76. It was suggested that Governments adopt a policy that all trade deals involving maritime transport be evaluated in the light of Sustainable Development Goal 14. Trade deals that directly or indirectly threaten ocean health and the achievement of Goal 14 should be rejected. Moreover, parliamentarians expressed concern that Governments had fewer resources for the implementation of the Sustainable Development Goals than might otherwise be the case because of corporate tax evasion. The role of parliamentarians in insisting on transparency with regard to corporate taxation and ensuring fair taxation was underscored.

77. The participation of many landlocked nations at the hearing was testament to the notion that the ocean extends "from mountain top to ocean floor". Parliamentarians from Bhutan, Bolivia (Plurinational State of) and Burundi, three landlocked countries, noted that rivers, streams and lakes are all part of the ocean system. A parliamentarian from the Democratic Republic of the Congo noted that Lake Tanganyika must be protected because its waters flow far downstream into the Atlantic Ocean. The interventions of these parliamentarians were important reminders that the ocean system reaches well beyond coasts.

78. Overall, the discussion made clear that, as one parliamentarian put it, "no single sector can tackle this alone". Even highly coordinated Governments cannot achieve their targets for Sustainable Development Goal 14 without the full support of citizens, civil society organizations and private companies.

Parliamentarians and their role in keeping Governments focused

79. In the lead-up to the Conference in June 2017, parliamentarians must help their Governments prepare for action on ocean sustainability. A sense of urgency around the issue is essential. Developed countries are encouraged to make generous voluntary commitments to support less developed nations in their work towards achieving Sustainable Development Goal 14. As one parliamentarian noted, the achievement of all of the Goals will require unprecedented amounts of money.

80. A parliamentarian from the United Kingdom of Great Britain and Northern Ireland encouraged his colleagues to embark on a three-step action plan with respect to the Conference:

(a) Before the Conference: in consultation with constituents, identify the position that their Governments should take on the issues that are being negotiated and advocate those positions with the relevant ministers;

(b) During the Conference: monitor their Government's commitments;

(c) After the Conference: hold their Governments responsible for implementing the commitments set out in the outcome document of the Conference and report to the Inter-Parliamentary Union on progress towards the realization of Sustainable Development Goal 14.

81. For more information about the process leading up to the Conference, parliamentarians were encouraged to visit the dedicated website (https://oceanconference.un.org/).

Public awareness and political will

82. Parliamentarians have an important role to play in raising their constituents' awareness of laws that will protect and sustain the ocean. Throughout the hearing, the following methods of raising public awareness were discussed.

Partnering with environment-focused non-governmental organizations

83. Non-governmental organizations provide expertise on environmental issues and can be highly effective in grass-roots activism, community-wide initiatives and social media campaigns. Parliamentarians can partner with such organizations to raise awareness about decisions facing the Government concerning ocean-related issues.

Advocating ocean literacy in national curricula

84. Parliamentarians can encourage their Governments to include ocean literacy in their respective national curricula. Citizens must be committed to sustainability as a rationale for personal and political choices.[2] Ocean literacy has practical benefits: a participant described how, during the 2005 tsunami, a young girl had saved herself and others, including her parents, because she had learned at school that waters receding dramatically were a sign of an incoming tsunami.

Developing a consumer force

85. By working with Governments to ensure that the private sector respects existing laws, parliamentarians can contribute to improved modes of production. By raising public awareness, parliamentarians can help citizens organize themselves as a consumer force that demands more sustainable goods.

Using social media: local, national and regional outreach

86. Parliamentarians noted that social media is effective for mobilizing citizens on environmental issues. Social media can help local, national and regional communities organize environmental advocacy and action.

Celebrating World Oceans Day on 8 June

87. World Oceans Day is a global day of celebration and collaboration for a better future. Parliamentarians suggested using 8 June to engage citizens in public awareness around ocean sustainability.

[2] There are many existing ocean literacy curricula that are of high quality, many of which are open-source and free of charge. One model of an effective ocean literacy programme is Green Schools Ireland, which promotes long-term, whole-school action on behalf of the environment in concert with the surrounding community.

IV. Conclusion: moving with purpose towards the Conference

88. In preparation for the Conference in June, parliamentarians will be working to foster discussions on the ocean within their parliaments and among constituents, generating political will for a strong outcome document. Parliamentarians are encouraged to request a briefing on their Governments' preparations for the Conference, as well as on the negotiations towards a new international legally binding agreement under the United Nations Convention on the Law of the Sea.

89. Parliamentarians will need to work proactively in support of laws, regulations and budgets that are consistent with the overarching objective of Sustainable Development Goal 14 to reverse the decline of the ocean and secure its long-term sustainability. This will require a more critical perspective on a way of life, particularly in developed countries, that has created unsustainable rates of consumption and pollution. The crisis of the ocean's health represents an opportunity for a shift in value systems and behaviour that is more aligned with sustainability and consideration for others, beginning with the most vulnerable.

90. The waters of the ocean are a common good, which constitutes a compelling argument for international cooperation and the observance of international law. What some countries do or fail to do affects all other countries and the high seas, which are not subject to the authority of any one country. All humans, even in inland States, are affected by the health of the ocean.

91. The problem of ocean decline is too large for any organization, country or sector to handle alone. All stakeholders, including Governments, parliaments, the private sector, civil society and non-governmental organizations, must work together to support the regeneration of the ocean.

Annex

List of speakers

Opening session

President of the General Assembly, Peter Thomson

President of the Inter-Parliamentary Union, Saber Chowdhury

Under-Secretary-General for Economic and Social Affairs, Wu Hongbo, on behalf of the Secretary-General

Session I

The state of the oceans: challenges and opportunities

Member of Parliament, House of Commons, United Kingdom of Great Britain and Northern Ireland, Nigel Evans

Ambassador, Deputy Permanent Representative of New Zealand to the United Nations, Carolyn Schwalger

Joint Coordinator, Group of Experts of the Regular Process for Global Reporting and Assessment of the State of the Marine Environment, including Socioeconomic Aspects, Alan Simcock

Director, International Oceans Programme, National Resources Defence Council, Lisa Speer

Executive Secretary, Intergovernmental Oceanographic Commission, Vladimir Ryabinin

Session II

The economic benefit of oceans: balancing exploitation with environmental preservation

Senator, Senate of Mexico, Gabriela Cuevas

Senator, Senate of Kenya, John Munyes

Ambassador, Permanent Representative of Timor-Leste to the United Nations, Maria Helena Lopes de Jesus Pires

Chair of the Global Agenda Council on Oceans, World Economic Forum, Nishan Degnarain

Executive Secretary, International Collective in Support of Fishworkers, Sebastian Mathew

Session III

Protecting and preserving marine life: the disruptive effects of pollution, marine debris and other waste and opportunities for change

Deputy Prime Minister and Minister for International Development Cooperation and Climate, Sweden, and Co-President of the United Nations Conference to Support the Implementation of Sustainable Development Goal 14, Isabella Lövin

Ambassador, Permanent Representative of the Maldives to the United Nations, Ahmed Sareer

Co-Chair, Working Group on microplastics, Joint Group of Experts on the Scientific Aspects of Marine Protection, Chelsea Rochman

Founding President and CEO, World Ocean Council, Paul Holthus

Coordinator, Global Programme of Action for the Protection of the Marine Environment from Land-Based Activities, United Nations Environment Programme, Habib El-Habr

The climate change connection: rising sea levels, acidification and other ecosystem changes

Speaker, Parliament of Fiji, Jiko Fatafehi Luveni
Ambassador, Permanent Representative of Monaco to the United Nations, Isabelle Picco

Professor at the Alfred Wegener Institute and Co-Chair of Working Group II, Intergovernmental Panel on Climate Change, Hans-Otto Pörtner

President of the Global Ocean Forum, Biliana Cicin-Sain

Session IV

Ocean governance: strengthening of peace, maritime security, cooperation and friendly relations among all nations

Member of Parliament, National Assembly of Thailand, Bilaibhan Sampatisiri

Commissioner for Environment, Maritime Affairs and Fisheries, European Commission, Karmenu Vella

Ambassador, Permanent Representative of Brazil to the United Nations, Mauro Vieira

Secretary-General, International Seabed Authority, Michael Lodge

Senior High Seas Adviser, Global Marine and Polar Programme, International Union for Conservation of Nature, Kristina Gjerde
Strategic Negotiator, Global Infrastructure at Google, Member of the International Cable Protection Committee, Jayne Stowell

Closing session

Secretary-General of the Inter-Parliamentary Union, Martin Chungong

President of the General Assembly, Peter Thomson